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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/590,474	05/11/2007	Partrick Schafer	AP 10890	8551

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CONTINENTAL TEVES, INC.
ONE CONTINENTAL DRIVE
AUBURN HILLLS, MI 48326-1581

EXAMINER	
LI, CE LI	
ART UNIT	PAPER NUMBER
3661	
MAIL DATE	DELIVERY MODE
09/26/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/590,474	SCHAFER ET AL.	
	Examiner	Art Unit	
	CE LI	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 August 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) *1-8* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *9-16* is/are rejected.

7)☒ Claim(s) *9* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 August 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *08/23/2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 9 is objected to because of the following informalities: Line 3 of Claim 9 recites "quantitie" which appears to be a misspelling of the word "quantity". Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 9-16 are rejected under 35 U.S.C. 102(b) as being *anticipated* by Matthias et al (DE 10162689).

Matthias discloses a method and a device for monitoring signal processing units for sensors (Abstract), comprising:

detecting at least one individual process control quantitie or process measured values (Figure 1, 101-105);

evaluating redundant processing of sensor data in two identical signal processing units (Figure 1: 108, 110, 112 and 109, 111, 115);

checking for plausibility, independently and separately from one another (Translation page 4, 9), by at least two processing devices (Figure 1: 108, 109) in two evaluation devices (Figure 1: 110, 111);

and transmitting the sensor data between one processing device (Figure 1: 108, 109)) and one evaluation device (Figure 1: 110, 111) through separate signal lines (Figure 1: Data1, Data 2).

wherein the sensor data that is separately evaluated and checked for plausibility (Translation page 4, 9) in every evaluation device (Figure 1: 110, 111) is exchanged by way of an interface (Figure 1: cross check) between the evaluation devices (Figure 1: 110, 111).

wherein sensor data and the condition information of a specific other evaluation unit that have been evaluated and checked for plausibility (Translation page 4, 9) are sent to a control device (Figure 1: 117) of a vehicle by each evaluation device (Figure 1: 110, 111), independently of the other one.

wherein the sensor data and condition information of the other evaluation unit (Figure 1: 110, 111), which have been evaluated and checked for plausibility (Translation page 4, 9), are transmitted to the control device (Figure 1: 117) of the vehicle by way of internal separate signal lines (Figure 1: D1i, D2i) by way of one data bus each (Figure 1: 116).

A device (Figure 1) for monitoring signal processing units for sensors, which determine the individual process control quantities or process measured values of a process (Figure 1, 101-105), the device comprising: two or more identical signal processing units (Figure 1: 108, 110, 112 and 109, 111, 115) for redundant processing of data; and two or more processing devices (Figure 1: 108, 109) and two evaluation devices (Figure 1: 110, 111), in which sensor data is evaluated and checked for plausibility (Translation page 4, 9) independently of and separately from one another, wherein each processing device (Figure 1: 108, 109) is connected with a specific evaluation device (Figure 1: 110, 111) by way of separate signal lines (Figure 1: Data1, Data 2), and the sensor data is transmitted between the one processing device (Figure 1: 108, 109) and the specific evaluation device (Figure 1: 110, 111) by way of the separate signal line (Figure 1: Data1, Data 2).

wherein the sensor data, which is separately evaluated and checked for plausibility (Translation page 4, 9) in every evaluation device (Figure 1: 110, 111), is exchanged by way of an interface (Figure 1: cross check) between the evaluation devices (Figure 1: 110, 111).

wherein each evaluation device (Figure 1: 110, 111), independently of the others, sends the sensor data and the condition information of the other evaluation unit, which are evaluated and checked for plausibility (Translation page 4, 9), to a vehicle control device (Figure 1: 117).

wherein each evaluation unit (Figure 1: 110, 111) is connected with a data bus (Figure 1: 112, 115) by way of an internal separate signal line (Figure 1: D1i, D2i), and the sensor data and condition information of the specific other evaluation unit (Figure 1: 112, 115) that have been evaluated and checked for plausibility (Translation page 4, 9) are transmitted to the vehicle control device by way of the specific data bus (Figure 1: 112, 115).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Giers (US 6,410, 993) discloses two identical circuits with redundant data processing for sensors.

Bohm et al (US 6,345, 225) discloses a redundant detection of a drivers brake pedal actuation by means of a suitable sensor system.

Donat et al (US 6,396,398) discloses a redundant method for the evaluation of sensor signals.

Muller et al (US 5,654,888) discloses two computer elements for carrying out at least the same control function.

Lohberg et al (US 7,167,785) discloses a system for detecting safety-critical measured quantities, comprising at least two independent measuring channels with sensors that are independent of one another and elements for verifying a malfunction or a failure of the measuring channels.

Golzer et al (US 5,339,782) discloses two control units monitor the measuring device on the basis of the output signals.

Knueppel et al (US 7,324,900) discloses conducting a plausibility check by checking the states of one or more sensors in a system with respect to one or more selected fixed parameters.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CE LI whose telephone number is (571)270-5564. The examiner can normally be reached on Monday to Friday, 9AM-5PM, EST, every other Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571)272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/CE LI/
Examiner, Art Unit 3661

/Thomas G. Black/

Supervisory Patent Examiner, Art Unit 3661